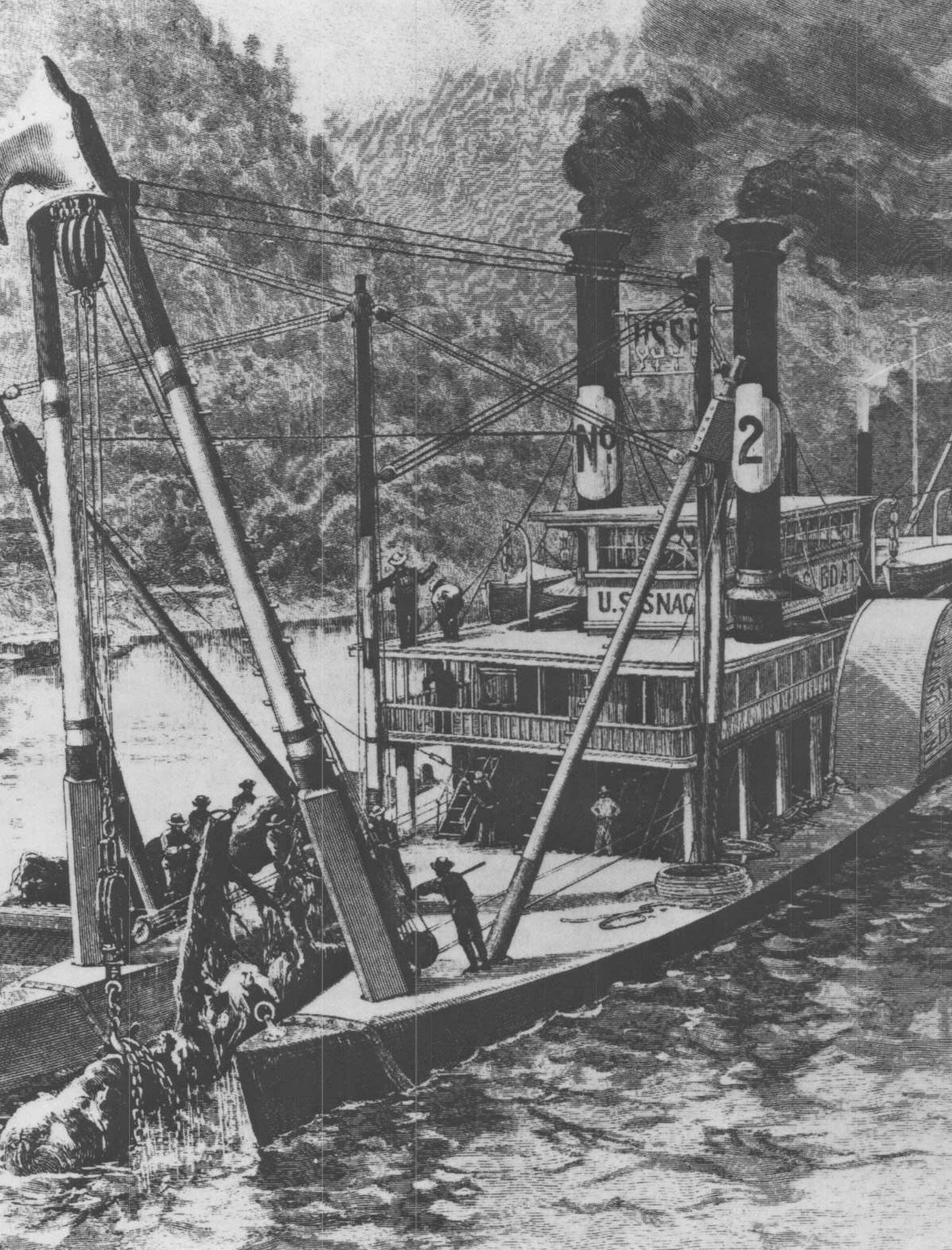
No
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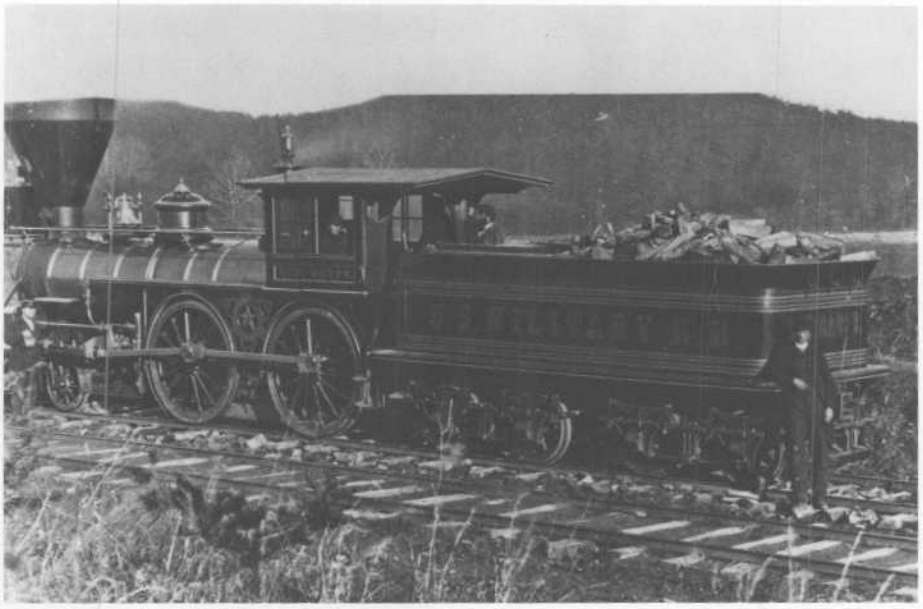
U.S.S.NAG

Origins of Civil Works Missions



Public Affairs Office, Corps of Engineers

Engineers aid in railroad construction, c.1880.

Army Art Collection

John C. Calhoun, by John Wesley Jarvis.

One of the major lessons of the War of 1812 was that the nation needed an improved defense and transportation system. The British had invaded the country from the north, from the south at New Orleans, and from the east, marching inland and even putting the capital to the torch. In the 1816 mobilization studies based upon the lessons of the War of 1812, the Corps of Engineers reported that national defense should rest upon four pillars: a strong Navy at sea; a highly mobile regular Army supported by reserves and National Guard; invincible defenses on the seacoasts; and improved rivers, harbors and transportation systems that would permit rapid armed concentration against an invading enemy and swifter, more economical logistical lines.

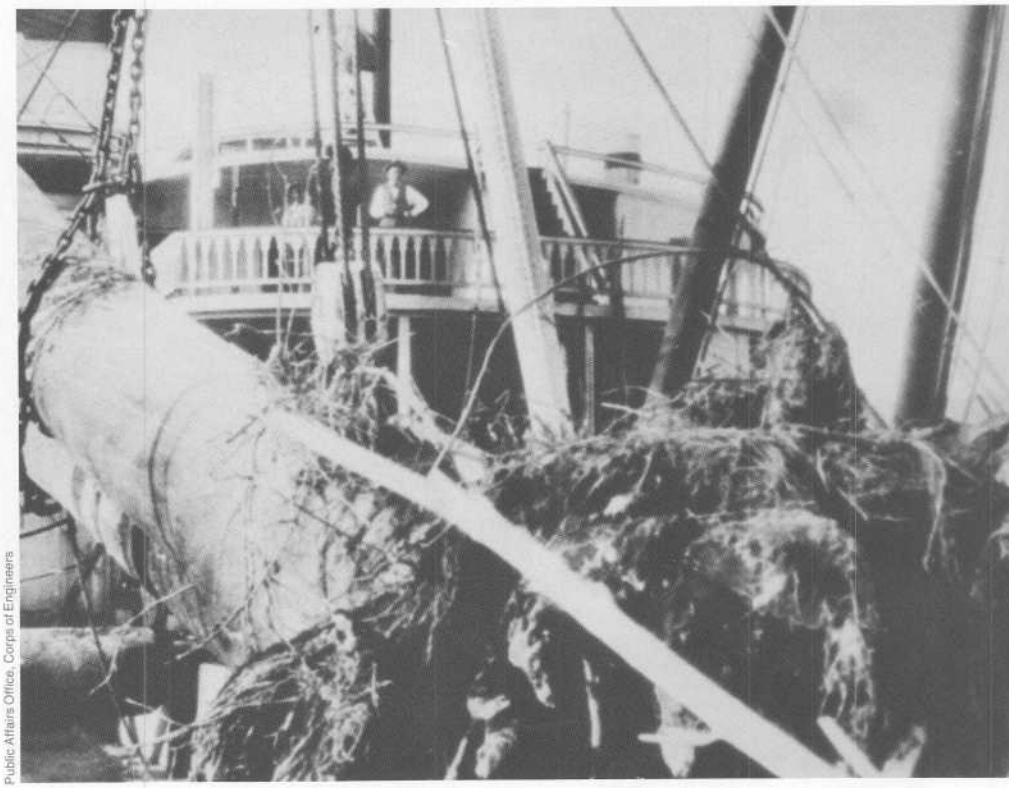
In 1819 John C. Calhoun, then secretary of war, recommended that the Corps of Engineers be directed to improve waterways navigation and other transportation systems because such civil works projects would facilitate the movement of the Army and its materials while contributing to national economic development. "It is in a state of war when a nation is compelled to put all of its resources . . . into requisition," said Calhoun, "that its Government realizes in its security the beneficial effects from a people made prosperous by a wise direction of its resources in peacetime."

Congress finally accepted Calhoun's recommendations in 1824.

Public Affairs Office, Corps of Engineers

U.S. Snagboat No. 2, similar to those constructed in the 1840s and 1850s, from *Harper's Weekly*, November 2, 1889.

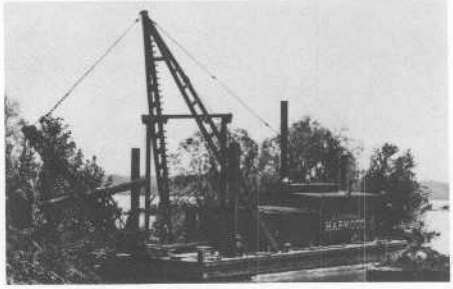
Snagboat clearing debris.



Public Affairs Office, Corps of Engineers

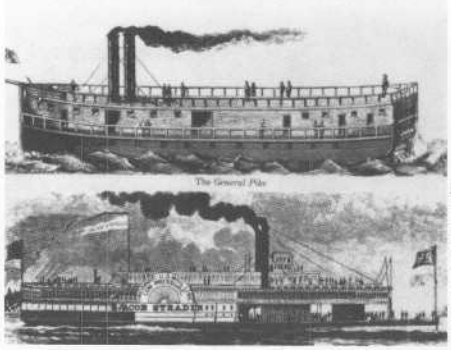
U.S. Steamer *Aid* battles raft no. 5 on the Red River.

U.S. Military Academy Library



Public Affairs Office, Corps of Engineers

U.S. Dredge *Harwood* at Milton's Bluff, Muscle Shoals, Alabama, May 1889.



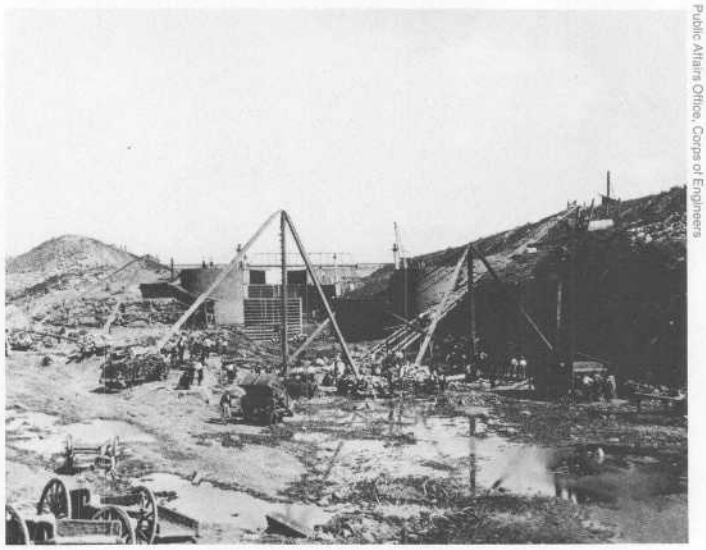
Up the Heights of Fame and Fortune, by Frederick B. Read, 1873

Early steamers on the Ohio, c.1820.

It passed a General Survey Act on April 30 that authorized the President to use Army engineers to survey road and canal routes "of national importance, in a commercial or military point of view." A few weeks later, on May 24, Congress appropriated $75,000 for improving navigation on the Ohio and Mississippi rivers. This law allowed the President to employ "any of the engineers in the public service which he may deem proper" for the work.

Under the May 24 act, the Corps began to remove snags and floating trees from the Ohio and Mississippi rivers and to improve the Ohio's channel by attacking the sandbars that impeded river commerce. By 1829 Army engineers were using snagboats developed by the famous steamboat captain Henry M. Shreve to remove obstructions in river channels. This early activity marked the beginning of the Corps' civil works mission—a dual role that emphasized a practical blending of civil works and military skills and fostered the development of a federal agency prepared to shoulder the engineering burden in the event of war or national emergency.

Louisville and Portland Canal under construction, 1871.



Public Affairs Office, Corps of Engineers

"A Globe of Compression": Brigadier General Joseph G. Swift and the New York Fire of 1835

Long before the Corps as an organization was charged with aiding victims of natural disasters, Army engineers as individuals lent a helping hand to fellow citizens in time of trouble. An early example of the engineer as good samaritan was provided by Brigadier General Joseph G. Swift, former Chief Engineer, during the great New York fire of 1835.

Fire broke out in lower Manhattan on December 16 of that year. It spread rapidly, consuming houses and stores. The blaze threatened to devour the entire city.

Alarmed and desperate, the New York City mayor turned to General Swift, a municipal hero since 1814, when he directed the city's defense against threatened British attack. At the time of the fire, Swift was retired from the Army and working as a civilian on harbor improvements for the Corps. Swift decided to contain the blaze behind a line of purposely demolished buildings. He calculated how much gun powder would be needed to "shake down" a house without damaging neighboring properties. Then he directed the placing of the charges in such a way to create "a globe of compression" when ignited. As the powder went off, walls toppled inward and houses collapsed in ruins upon themselves, leaving adjacent structures unharmed. A novelty at the time, this technique is now common practice in the urban demolition business.

At great personal risk, Swift set off charge after charge, arresting the fire's advance on December 17 and thus saving countless lives and millions of dollars in property. For the second time in two decades, he received the city's official thanks.